

## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

United States Patent and Trademark  
Office  
Washington, D.C.

in its capacity as elected Office

Date of mailing:

02 March 1993 (02.03.93)

International application No.:

PCT/GB92/01416

Applicant's or agent's file reference:

38.58483

International filing date:

31 July 1992 (31.07.92)

Priority date:

01 August 1991 (01.08.91)

Applicant:

GARDNER, Michael, Stuart

1. The designated Office is hereby notified of its election made:



in the demand filed with the International preliminary Examining Authority on:

17 February 1993 (17.02.93)



in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

was not

made before the expiration of 19 months from the priority date.

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer:

I. Hours

Telephone No.: (41-22) 730.91.11

## PATENT COOPERATION TREATY

PCT

From the INTERNATIONAL BUREAU

NOTIFICATION CONCERNING  
DOCUMENT TRANSMITTED

To:

United States Patent and Trademark  
Office  
Washington, D.C.

in its capacity as elected Office

Date of mailing:

25 October 1993 (25.10.93)

International application No.:

PCT/GB92/01416

International filing date:

31 July 1992 (31.07.92)

Applicant:

HAWKINS, Michael, Howard et al

The International Bureau transmits herewith the following documents and number thereof:

\_\_\_\_\_ copy of the international preliminary examination report (Article 36(3)(a))

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorised officer:

P. Asseeff

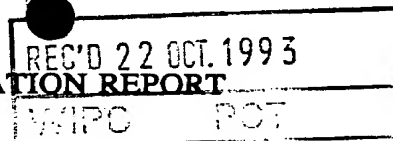
Telephone No.: (41-22) 730.91.11

# PATENT COOPERATION TREATY PCT

28

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



|   |   |  |
|---|---|--|
| Applicant's or agent's file reference<br><b>38.58483</b>    | <b>For Further Action</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |  |
| International Application No.<br><b>PCT/GB92/01416</b>      | International Filing Date<br>(day/month/year) <b>31 July 1992</b>   | Priority Date<br>(day/month/year) <b>1 August 1991</b> |
| International Patent Classification (IPC) <b>A01K 11/00</b> |   |  |
| Applicant <b>HAWKINS, MICHAEL HOWARD ET AL</b>              |   |  |

|      |   |   |                                     |                     |    |                          |          |     |                          |  |    |                          |                            |   |                                     |   |    |                          |                         |     |                                     |  |      |                          |   |
|------|---|---|-------------------------------------|---------------------|----|--------------------------|----------|-----|--------------------------|--|----|--------------------------|----------------------------|---|-------------------------------------|---|----|--------------------------|-------------------------|-----|-------------------------------------|--|------|--------------------------|---|
| 1.   | This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.  |   |                                     |                     |    |                          |          |     |                          |  |    |                          |                            |   |                                     |   |    |                          |                         |     |                                     |  |      |                          |   |
| 2.   | This <b>REPORT</b> consists of a total of <b>4</b> sheets.<br><br><input type="checkbox"/> This report is also accompanied by <b>ANNEXES</b> i.e., sheets of the description, claims and/or drawings amended during international preliminary examination and/or containing rectifications made before this Authority.<br><br>These annexes consist of a total of      sheets.  |   |                                     |                     |    |                          |          |     |                          |  |    |                          |                            |   |                                     |   |    |                          |                         |     |                                     |  |      |                          |   |
| 3.   | This report contains indications relating to the following items:<br><br><table style="width: 100%; border: none;"> <tr> <td style="width: 5%;">I</td> <td style="width: 5%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 90%;">Basis of the report</td> </tr> <tr> <td>II</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Priority</td> </tr> <tr> <td>III</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td>IV</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Lack of unity of invention</td> </tr> <tr> <td>V</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td>VI</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Certain documents cited</td> </tr> <tr> <td>VII</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Certain defects in the international application</td> </tr> <tr> <td>VIII</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Certain observations on the international application</td> </tr> </table> | I   | <input checked="" type="checkbox"/> | Basis of the report | II | <input type="checkbox"/> | Priority | III | <input type="checkbox"/> | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability | IV | <input type="checkbox"/> | Lack of unity of invention | V | <input checked="" type="checkbox"/> | Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement | VI | <input type="checkbox"/> | Certain documents cited | VII | <input checked="" type="checkbox"/> | Certain defects in the international application | VIII | <input type="checkbox"/> | Certain observations on the international application |
| I    | <input checked="" type="checkbox"/>   | Basis of the report   |                                     |                     |    |                          |          |     |                          |  |    |                          |                            |   |                                     |   |    |                          |                         |     |                                     |  |      |                          |   |
| II   | <input type="checkbox"/>  | Priority  |                                     |                     |    |                          |          |     |                          |  |    |                          |                            |   |                                     |   |    |                          |                         |     |                                     |  |      |                          |   |
| III  | <input type="checkbox"/>  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |                                     |                     |    |                          |          |     |                          |  |    |                          |                            |   |                                     |   |    |                          |                         |     |                                     |  |      |                          |   |
| IV   | <input type="checkbox"/>  | Lack of unity of invention  |                                     |                     |    |                          |          |     |                          |  |    |                          |                            |   |                                     |   |    |                          |                         |     |                                     |  |      |                          |   |
| V    | <input checked="" type="checkbox"/>   | Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |                                     |                     |    |                          |          |     |                          |  |    |                          |                            |   |                                     |   |    |                          |                         |     |                                     |  |      |                          |   |
| VI   | <input type="checkbox"/>  | Certain documents cited   |                                     |                     |    |                          |          |     |                          |  |    |                          |                            |   |                                     |   |    |                          |                         |     |                                     |  |      |                          |   |
| VII  | <input checked="" type="checkbox"/>   | Certain defects in the international application  |                                     |                     |    |                          |          |     |                          |  |    |                          |                            |   |                                     |   |    |                          |                         |     |                                     |  |      |                          |   |
| VIII | <input type="checkbox"/>  | Certain observations on the international application   |                                     |                     |    |                          |          |     |                          |  |    |                          |                            |   |                                     |   |    |                          |                         |     |                                     |  |      |                          |   |

|   |  |
|---|--|
| Date of submission of the demand <b>17 February 1993</b>  | Date of completion of this report <b>5 October 1993</b>                      |
| Name and mailing address of the IPEA <b>The Patent Office<br/>Cardiff Road<br/>NEWPORT<br/>Gwent<br/>NP9 1RH</b><br><br>Facsimile No <b>0633 814444</b> | Authorized Officer <b>K J Kennett</b><br><br>Telephone No <b>0633 814730</b> |

## I. Basis of the report

1. This report has been drawn on the basis of:

- ☒ the international application as originally filed.
- ☐ the description,      pages, as originally filed,  
                                 pages, filed with the demand,  
                                 pages, filed with the letter of  
                                 pages, filed with the letter of
- ☐ the claims,      pages, as originally filed,  
                                 pages, as amended under Article 19,  
                                 pages, filed with the demand,  
                                 pages, filed with the letter of  
                                 pages, filed with the letter of
- ☐ the drawings,      sheets, as originally filed,  
                                 sheets, filed with the demand,  
                                 sheets, filed with the letter of  
                                 sheets, filed with the letter of

2. The amendments have resulted in the cancellation of: pages: \_\_\_\_\_  
   sheets of drawings No: \_\_\_\_\_3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box.

4. Additional observations, if necessary:

## II. Priority

1. ☐ This report has been established as if no priority had been claimed due to the failure to furnish within the prescribed time limit the requested:
- ☐ copy of the earlier application whose priority has been claimed.
- ☐ translation of the earlier application whose priority has been claimed.
2. ☐ This report has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid.

Thus for the purposes of this report, the international filing date indicated above is considered to be the relevant date.

**V. Reasoned statement under Article 32 with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. STATEMENT**

|                               |                |     |
|-------------------------------|----------------|-----|
| Novelty (N)                   | claims 5       | YES |
|                               | claims 1-4,6,7 | NO  |
| Inventive Step (IS)           | claims 5       | YES |
|                               | claims 1-4,6,7 | NO  |
| Industrial Applicability (IA) | claims 1-7     | YES |
|                               | claims         | NO  |

**2. CITATIONS AND EXPLANATIONS**

Claims 1-4, 6 and 7 do not meet the requirement of novelty having regard to the matter disclosed in EP 0004221; US 4402320 and US 4368735 cited in the International Search Report since the specifications describe animal ear tag applicators having elongate tag engagement means pivotally connected to one end of a jaw member.

Claim 5 meets the requirements of novelty and inventive step in that the features defined in the claim are neither disclosed nor suggested in the cited prior art.

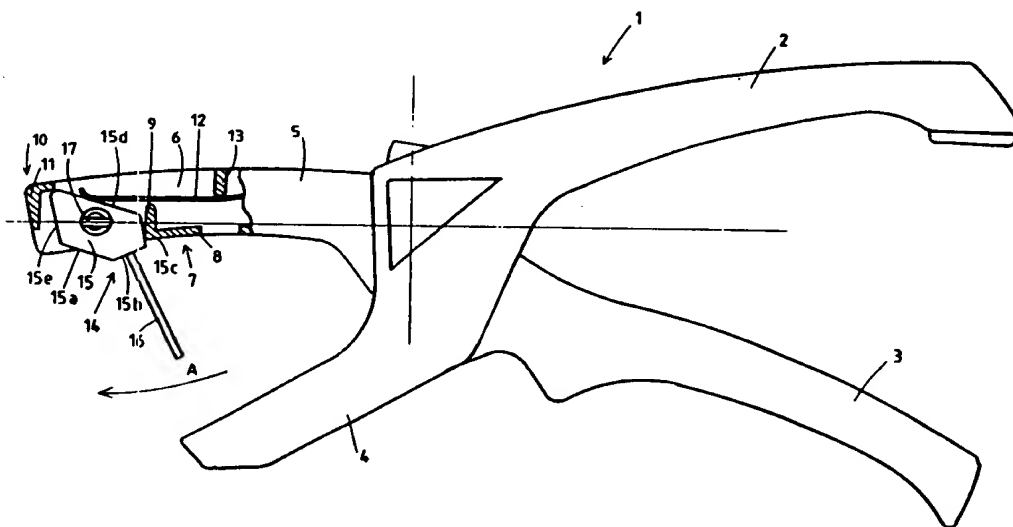
## VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

Claim 8 does not comply with Rule 6.2(a) since it relies on a reference to the description and/or drawings.

## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

|   |           |  |
|---|-----------|--|
| <b>(51) International Patent Classification 5 :</b><br><br><b>A01K 11/00</b>  | <b>A1</b> | <b>(11) International Publication Number:</b> <b>WO 93/02549</b><br><br><b>(43) International Publication Date:</b> 18 February 1993 (18.02.93)  |
| <b>(21) International Application Number:</b> PCT/GB92/01416<br><b>(22) International Filing Date:</b> 31 July 1992 (31.07.92)<br><br><b>(30) Priority data:</b><br>239223 1 August 1991 (01.08.91) NZ<br><br><b>(71) Applicant (for all designated States except US):</b> HAWKINS, Michael, Howard [GB/NZ]; 33a Birdwood Crescent, Parnell, Auckland 1001 (NZ).<br><br><b>(72) Inventor; and</b><br><b>(75) Inventor/Applicant (for US only) :</b> GARDNER, Michael, Stuart [NZ/NZ]; 108 Waiatarua Road, Remuera, Auckland 1005 (NZ).<br><br><b>(74) Agent:</b> FRANK B. DEHN & CO.; Imperial House, 15-19 Kingsway, London WC2B 6UZ (GB). |           | <b>(81) Designated States:</b> AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE, US, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG).<br><br><b>Published</b><br><i>With international search report.</i> |

**(54) Title:** EAR TAG APPLICATOR**(57) Abstract**

The invention relates to an applicator for use on livestock such as cattle, sheep, deer and the like. The applicator includes at least two pivotally connected handle members (2, 3) which extend into upper and lower jaws (4, 5). A driving means (14) comprising a five sided body portion and elongate tag engagement (16) means to which an ear tag can be attached which are pivotally connected to the upper jaw member (5). There is also provided a biasing means (12) which is in constant contact with one side of the body portion and is used in conjunction with a restraining means (7) to ensure that the tag engagement means (16) is maintained in a downwardly pointing "cocked" position during application of an ear tag. Upon insertion of the ear tag through the animal's ear, the tag engagement means (16) can be pivoted into a second "spent" position to facilitate easy detachment of the applicator from the ear tag. The orientation of the tag engagement means (16) being determined by the combined effect of the restraining means (7, 11) biasing means (12) and load placed on the tag engagement means (16) itself.

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau

B 445776210

## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 5 :

A01K 11/00

A1

(11) International Publication Number:

WO 93/02549

(43) International Publication Date:

18 February 1993 (18.02.93)

(21) International Application Number: PCT/GB92/01476

(22) International Filing Date: 31 July 1992 (31.07.92)

(30) Priority data:  
239223

1 August 1991 (01.08.91) NZ

(71) Applicant (for all designated States except US): HAWKINS, Michael, Howard (GB/NZ); 33a Birdwood Crescent, Parnell, Auckland 1001 (NZ).

(72) Inventor; and

(75) Inventor/Applicant (for US only): GARDNER, Michael, Stuart (NZ/NZ); 108 Waiatarua Road, Remuera, Auckland 1005 (NZ).

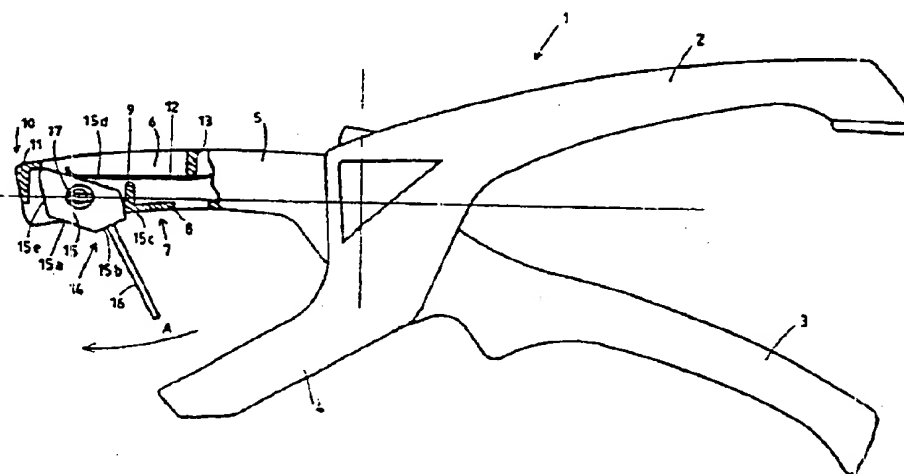
(74) Agent: FRANK B. DEHN &amp; CO.; Imperial House, 15-19 Kingsway, London WC2B 6UZ (GB).

(31) Designated States: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE, US, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG).

Published

With international search report.

(54) Title: EAR TAG APPLICATOR



(57) Abstract

The invention relates to an applicator for use on livestock such as cattle, sheep, deer and the like. The applicator includes at least two pivotally connected handle members (2, 3) which extend into upper and lower jaws (4, 5). A driving means (14) comprising a five sided body portion and elongate tag engagement (16) means to which an ear tag can be attached which are pivotally connected to the upper jaw member (5). There is also provided a biasing means (12) which is in constant contact with one side of the body portion and is used in conjunction with a restraining means (7) to ensure that the tag engagement means (16) is maintained in a downwardly pointing "cocked" position during application of an ear tag. Upon insertion of the ear tag through the animal's ear, the tag engagement means (16) can be pivoted into a second "spent" position to facilitate easy detachment of the applicator from the ear tag. The orientation of the tag engagement means (16) being determined by the combined effect of the restraining means (7, 11) biasing means (12) and load placed on the tag engagement means (16) itself.



B 445776210

08/185994

EAR TAG APPLICATOR

The present invention relates to an improved ear tag applicator.

5 More particularly, the present invention relates to an improved applicator for applying ear tags to animals whereby the ear tag engagement means is locked until the tag is inserted and whereupon it pivots away from the applicator upon insertion of the tag.

10 To the present time a wide range of ear tag applicators have been known. These generally consist of a pliers type of applicator, often of the trocar type, which usually involves a hand held appliance whereby in use a pin or blade pierces the animal's ear and then draws through the head of the ear tag. In such  
15 applicators the manner in which the blade or pin is positioned and directed is important. Prior art applicators have used a variety of means to achieve this including a relatively complex slidingly movable element within a housing as found in New Zealand Patent  
20 Specification No. 205008. Other applicators have utilised the use of mechanical retention means to keep the blade or pin in position prior to, during or after insertion of the ear tag.

25 The aforesaid applicators have tended to be complex and/or inefficient. It is an object of the present invention to address these difficulties.

SUBSTITUTE SHEET

According to one broad aspect of the invention there is provided an applicator for an animal ear tag including at least two pivotally connected handle members extending into or being attached to first and second jaws, and a driving means comprising a body portion and elongate tag engagement means characterised in that the driving means is pivotally connected adjacent one end of the first jaw member to enable the driving means to pivot about and relative to its pivotal attachment to the first jaw member.

According to another broad aspect of the invention there is provided an applicator tool for applying an ear tag to an animal comprising actuating means connected to upper and lower jaw means the said jaw means being movable towards and away from each other, driving means comprising a body portion and elongate tag engagement means wherein the tag engagement means is pivotable and the load on the tag engagement means is located below the point of pivot thereby restraining said tag engagement means in a first position and whereby said tag engagement means is pivotable away from the applicator to a second position once the ear tag has been applied to the animal.

In a preferred form of the invention the tag engagement means comprises a pin which in its first position is substantially diagonal to the upper and lower jaw means and is pivotable so as to lie in substantially the same plane as the upper jaw means upon insertion of an ear tag.

B 445776210

- 3 -

The driving means preferably consists of a body portion movable about a pivot wherein the said movement is determined by restraining means located around the said body portion and wherein biasing means assists to restrain the said driving means in a first position.

Further objects of the invention will become apparent from the following description which is given by way of example only of a preferred embodiment of the invention. Reference is made to the accompanying drawings wherein:

Figure 1: is a side elevational view of a preferred form of the applicator tool according to the invention showing the driving means in a "cocked" position and showing part of the upper jaw means partially cut away;

Figure 2: is again a partially cut away view of the applicator tool of Figure 1 showing the driving means in a "spent" position;

Figure 3: is a diagrammatic side elevational view of an applicator tool of Figure 1 to illustrate the insertion of a one piece ear tag - prior to insertion of the ear tag;

Figure 4: shows the insertion of the ear tag using the applicator shown in Figure 3 upon insertion of the ear tag through an animal's ear;

Figure 5: is an ear tag applicator as shown in Figure 1 illustrated with a two piece ear tag;

Figure 6: shows the applicator and ear tag of Figure 5 upon insertion of the ear tag through an animal's ear.

SUBSTITUTE SHEET

B 445776210

The applicator of the present invention may be constructed according to the pliers type of applicator tool, as embodied in existing applicator tools. In  
5 Figure 1, the applicator tool is referenced by Arrow 1. It has actuating means comprising upper handle 2 and lower handle 3. Upper handle 2 is integrally formed with lower jaw 4 and lower handle 3 is integrally formed with upper jaw 5. It will be appreciated that upon the  
10 closing of handles 2 and 3, upper jaw 5 and lower jaw 4 will be movable towards each other, and vice versa.

The cut away portion of upper jaw 5 discloses a hollow interior 6 within which are positioned various restraining means. The first is an "L" shaped  
15 restraining means 7 comprising an elongate base 8 and upstand 9. The other restraining means comprises an inverted "L" shaped restraining means 10 wherein the upstand 11 is substantially vertical.

The applicator tool has a biasing means 12 which is  
20 kept in tension by means of spacer 13.

The apparatus has a driving means 14 comprising a body portion 15, tag engagement means 16 and centrally located pivot 17.

It will be seen that body portion 15 has five sides  
25 - 15a, which in the "cocked" position in which the driving means is located in Figure 1, points downwardly, 15b to which is attached tag engagement

SUBSTITUTE SHEET

B 445776210

means 16, side 15c which abuts against restraining means 7, side 15d which is in abutment with the free end of biasing means 12 and 15e which points towards the front of the applicator tool.

5 In the present position, for convenience referred to as the "cocked" position the driving means is retained in position by restraining means 7 and biasing means 12. When an ear tag is loaded onto the tag engagement means, which in a preferred embodiment is pin  
10 shaped, the driving means will be retained in "cocked" position by virtue of the fact that the tag engagement means is located rearward and below of the point of pivot. This means that a minimal biasing of biasing means 12 is required to keep the pin in the "cocked"  
15 position.

As an illustration of the manner of operation of the applicator tool reference is made to Figures 3 and 4 wherein a one piece ear tag is shown to be applied. The ear tag 18 is shown to have a body portion 19 and  
20 pointed head 20. Figure 1 shows the applicator tool with the upper jaw 5 and lower jaw 4 in an open position and with the driving means in a "cocked" position. Figure 4 shows the driving means still in a "cocked" position but with the sharpened head 20 having pierced  
25 an animal's ear 21.

Figures 5 and 6 illustrate the applicator tool applying a two piece ear tag wherein the male portion of

SUBSTITUTE SHEET

WO 93/02549

PCT/GB92/01416

- 6 -

B 445 776 210

the ear tag 22 is attached to the tag engagement means (not shown) and wherein the female portion of the ear tag 23 is attached to a tag holder means 24 spring loaded onto lower jaw 4.

5 Figure 6 shows the same ear tag having pierced an animal's ear 21.

In all the above cases the driving means remains in a "cocked" position. It will be seen that upon completion of the above steps both handles 2 and 3 and  
10 jaws 4 and 5 will be in a closed position. Upon insertion of the tag through the animal's ear (or other skin) the tag engagement means will need to be removed from the ear tag/ear. This may be achieved by pulling the applicator tool away from the animal's ear or  
15 alternatively by the animal itself pulling away from the applicator tool.

Upon this occurring the tag engagement means 16 will pivot in the direction of arrow A. That is, from a substantially vertical to a substantially horizontal  
20 position as illustrated by position B of Figure 2. In this position, conveniently referred to as the "spent" position, the sides of body portion 15 will be located as follows: 15a will be positioned upwardly and forwardly, 15b forwardly, 15c downwardly, 15d downwardly  
25 and rearwardly and 15e would be restrained by means of the restraining means 12. Further travel would be

SUBSTITUTE SHEET

B 445776210

- 7 -

prevented by tag engagement means 10 striking the lower portion of restraining means 11.

It will be appreciated from the above that the tag engagement means of the present invention has a first  
5 "cocked" position and a second "spent" position, with the position being determined by the combined effect of the restraining means, biasing means and load placed on the tag engagement means itself. It will be seen that the movement of the driving means from the substantially  
10 vertical "cocked" position to the substantially horizontal "spent" position may be relatively simply and efficiently achieved with a minimum of movement and moving parts. This provides for an applicator tool having enhanced performance characteristics and one  
15 which provides greater ease of use for the person applying ear tags.

It will also be appreciated that the positioning of the tag engagement means is determined by a combination of factors as opposed to a specific restraining means  
20 which holds the body portion or tag engagement means in a fixed position until the tag is inserted.

Where in the foregoing description reference has been made to specific components or integers of the invention having known equivalents then such equivalents  
25 are herein incorporated as if individually set forth.

Although this invention has been described by way of example and with reference to possible embodiments

SUBSTITUTE SHEET

WO 93/02549

PCT/GB92/01416

- 8 -

B 445776210

thereof it is to be understood that modifications or improvements may be made thereto without departing from the scope or spirit of the invention.

5

10

15

20

25

SUBSTITUTE SHEET



B 4 4 5 7 7 6 2 1 0

CLAIMS

1. An applicator for an animal ear tag including at least two pivotally connected handle members extending into or being attached to first and second jaws, and a driving means comprising a body portion and elongate tag engagement means characterised in that the driving means is pivotally connected adjacent one end of the first jaw member to enable the driving means to pivot about and relative to its pivotal attachment to the first jaw member.
2. An applicator as claimed in claim 1 characterised in that during application of an ear tag the load on the tag engagement means is located behind the point of pivot thereby restraining said tag engagement means in a first position and whereby said tag engagement means is pivotable away from the applicator to a second position once the ear tag has been applied to the animal or upon cessation of movement of the first jaw member, relative to the second jaw member.
3. An applicator as claimed in claims 1 or 2 characterised in that the tag engagement means comprises a pin which in its first position is substantially diagonal to the upper and lower jaw means and is pivotable so as to lie in

SUBSTITUTE SHEET

B 445776210

substantially the same axis as the upper jaw means  
upon insertion of an ear tag.

4. An applicator as claimed in any one of the  
5 preceding claims characterised in that the movement  
of the driving means about the point of pivot is  
determined by restraining means located around said  
body portion and wherein biasing means assist to  
restrain the said driving means in a first  
10 position.
5. An applicator as claimed in claim 4  
characterised in that the body  
portion of said driving means is polygonal in shape  
15 and wherein the biasing means is in contact with at  
least part of the length of one of the sides of the  
body portion so as to restrain the said driving  
means in a predetermined position.
- 20 6. An applicator according to any one of the preceding  
claims characterised in that said second jaw member  
has formed within it a place to locate a second tag  
piece as required.
- 25 7. An applicator as claimed in any one of the  
preceding claims, wherein the handle members are  
pivotally connected one to the other; spring means

SUBSTITUTE SHEET

B 445 776 210

being provided so that the handle members and jaws are spring biased into a position in which they are normally spaced apart from one another.

- 5 8. An applicator for a livestock ear tag as substantially described herein with reference to any one or more of the accompanying drawings.

10

15

20

25

SUBSTITUTE SHEET

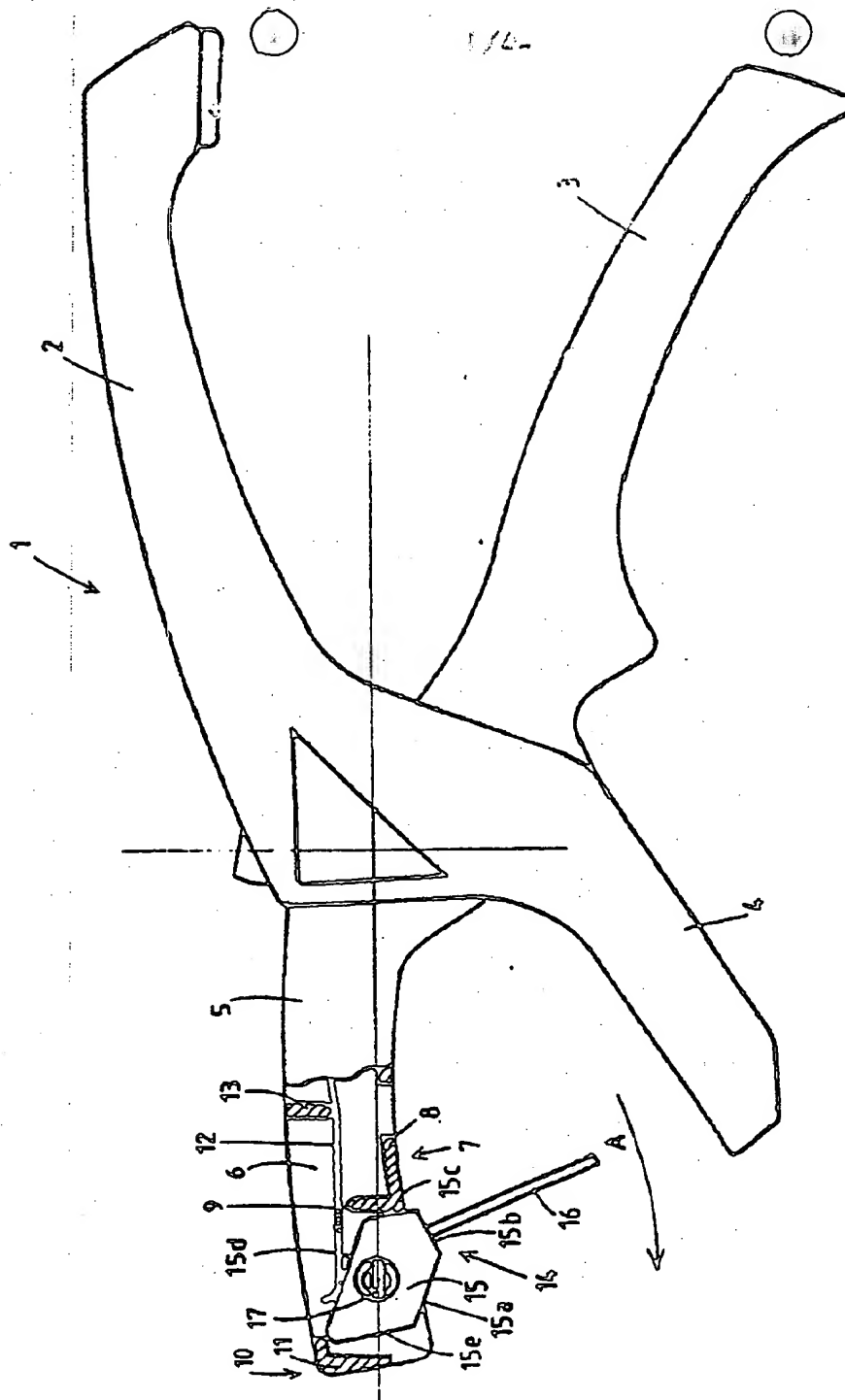


FIG. 1

SUBSTITUTE SHEET

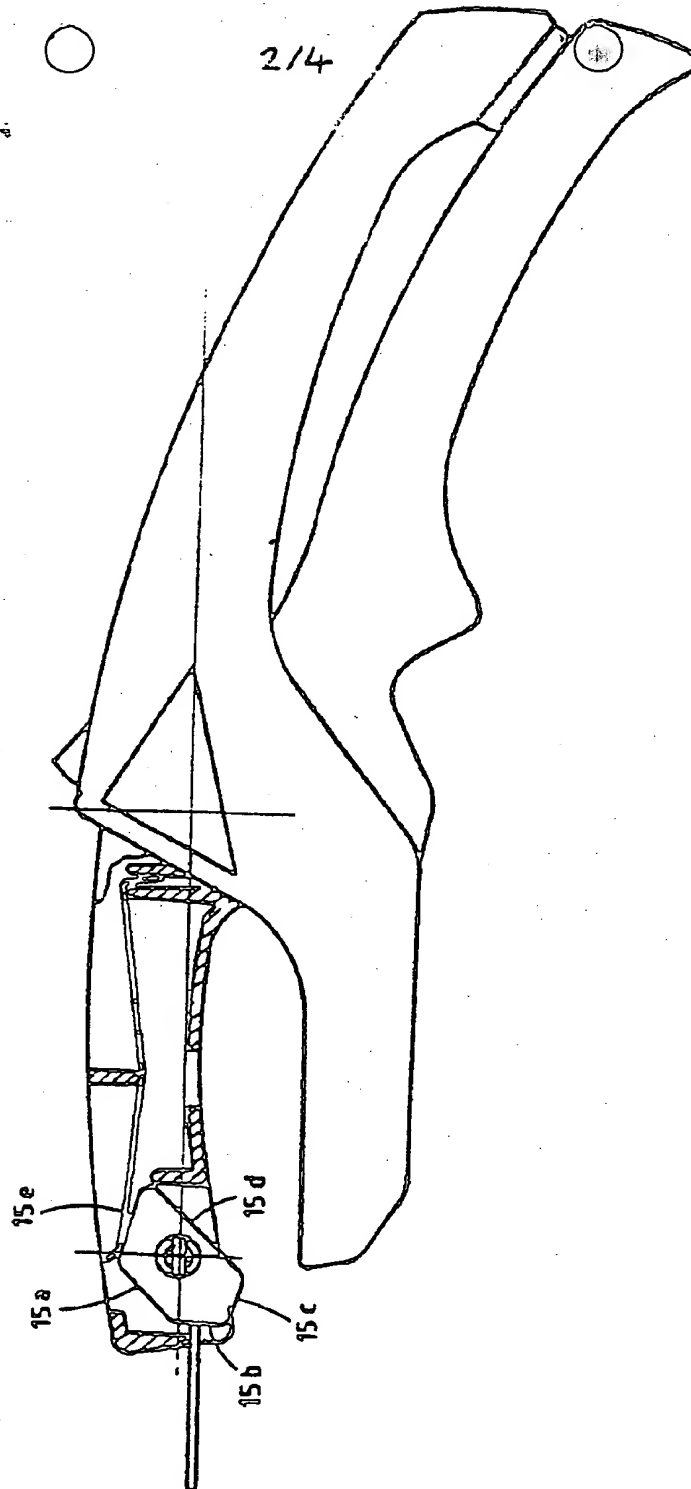


FIG. 2

SUBSTITUTE SHEET

3/4

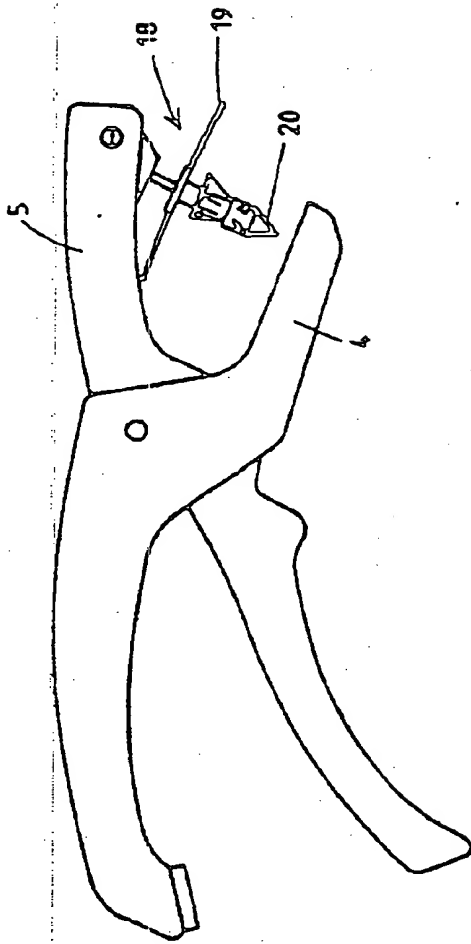


FIG. 3

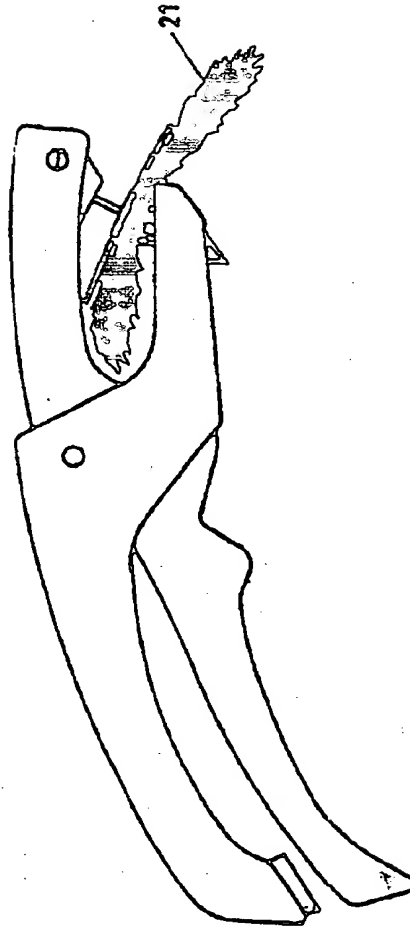


FIG. 4

SUBSTITUTE SHEET

4/4

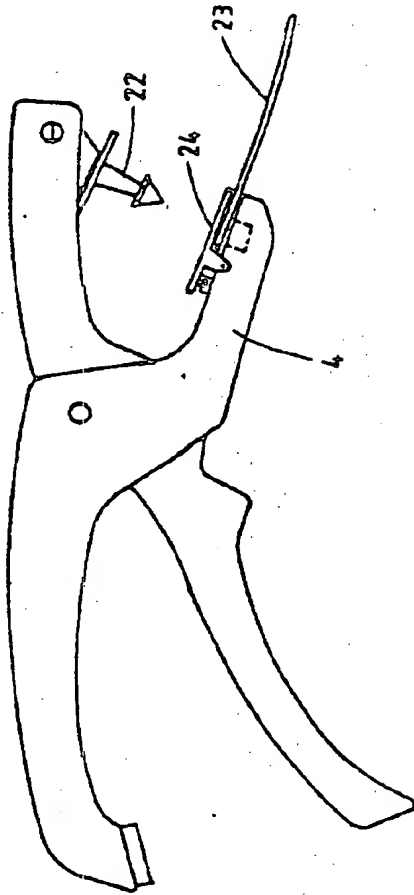


FIG. 5

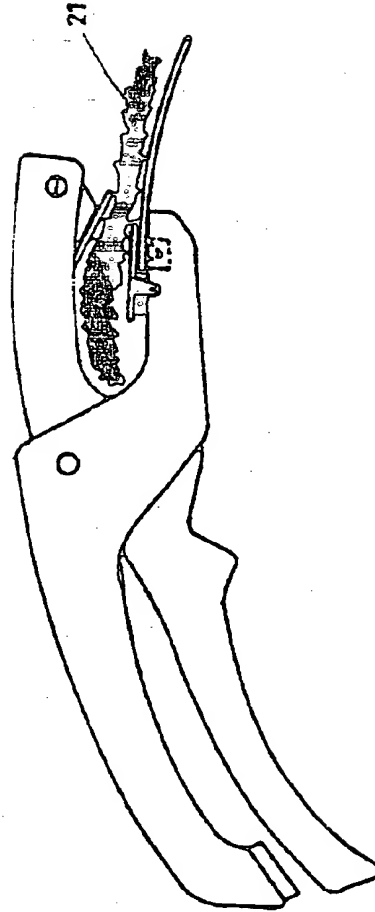


FIG. 6

SUBSTITUTE SHEET

B 445776210

## PATENT COOPERATION TREATY

from the INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

FRANK B. DEHN & CO.  
Imperial House  
15-19 Kingsway  
LONDON WC2B 6UZ  
UNITED KINGDOM

NOTIFICATION OF TRANSMITTAL OF  
THE INTERNATIONAL SEARCH REPORT  
OR THE DECLARATION

(PCT Rule 44.1)

FILE 58 483

16 NOV 1992

RECEIVED

ANSD

Date of mailing  
(day/month/year)

12 11 92

Applicant's or agent's file reference

38.58483

FOR FURTHER ACTION See paragraphs 1 and 4 below

International application No.

PCT/GB92/01416

International filing date

(day/month/year)

31/07/92

Applicant

HAWKINS, Michael Howard et al.

1. ☒ The applicant is hereby notified that the international search report has been established and is transmitted herewith.

## Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the international search report; however, for more details, see the notes on the accompanying sheet.

Where? To the International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland  
Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.
3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2; the applicant is notified that:
- ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
- ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

BUE DATES

NOTES

4. Further action(s): The applicant is reminded of the following:

Shortly after 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

Within 19 months from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the International Searching Authority



European Patent Office, P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Alfredo Prein



## NOTES TO FORM PCT/ISA/220

R 445776210

These notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty and of the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT administrative Instructions respectively.

## INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

**What parts of the international application may be amended?**

The claims only.

The description and the drawings may only be amended during international preliminary examination under Chapter II.

**When?**

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

**Where not to file the amendments?**

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

**How?**

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

**What documents must/may accompany the amendments?****Letter (Section 205(b)):**

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confounded with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

## NOTES TO FORM PCT/ISA/220 (continued)

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:  
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; Claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:  
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:  
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or  
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:  
"Claims 1-10 unchanged; claims 11 TO 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings which cannot be amended under Article 19(1).

The statement will be published with the international application and the amended claims.

The statement should be brief; it should not exceed 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It should not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

In what language?

The amendments must be made in the language in which the international application is published. The letter and any statement accompanying the amendments must be in the same language as the international application; if that language is English or French; otherwise, it must be in English or French, at the choice of the applicant.

Consequence if a demand for international preliminary examination has already been filed?

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase?

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

## PATENT COOPERATION TREATY

PCT

B 445776210

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

|  |   |   |
|--|---|---|
| Applicant's or agent's file reference<br><b>38.58483</b> | FOR FURTHER ACTION  | see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below. |
| International application No.<br><b>PCT/GB92/01416</b>   | International filing date (day/month/year)<br><b>31/07/92</b> | (Earliest) Priority Date (day/month/year)<br><b>01/08/91</b>  |
| Applicant<br><b>HAWKINS, Michael Howard et al.</b>       |   |   |

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ Certain claims were found unsearchable (see Box I).
2. ☐ Unity of invention is lacking (see Box II).
3. ☐ The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing
  - ☐ filed with the international application.
  - ☐ furnished by the applicant separately from the international application,
    - ☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.
  - ☐ Transcribed by this Authority
4. With regard to the title, ☒ the text is approved as submitted by the applicant.  
☐ the text has been established by this Authority to read as follows:
5. With regard to the abstract,
  - ☐ the text is approved as submitted by the applicant.
  - ☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.
6. The figure of the drawings to be published with the abstract is:  
Figure No. 1 ☒ as suggested by the applicant. ☐ None of the figures.  
☐ because the applicant failed to suggest a figure.  
☐ because this figure better characterizes the invention.

B 445776210

INTERNATIONAL SEARCH REPORT

International application No.

PCT/GB92/01416

## B. II TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

The invention relates to an applicator for use on livestock such as cattle, sheep, deer and the like. The applicator includes at least two pivotally connected handle members (2,3) which extend into upper and lower jaws (4,5). A driving means (14) comprising a five sided body portion and elongate tag engagement (16) means to which an ear tag can be attached which are pivotally connected to the upper jaw member (5). There is also provided a biasing means (12) which is in constant contact with one side of the body portion and is used in conjunction with a restraining means (7) to ensure that the tag engagement means (16) is maintained in a downwardly pointing "cocked" position during application of an ear tag. Upon insertion of the ear tag through the animal's ear, the tag engagement means (16) can be pivoted into a second "spent" position to facilitate easy detachment of the applicator from the ear tag. The orientation of the tag engagement means (16) being determined by the combined effect of the restraining means (7,11) biasing means (12) and load placed on the tag engagement means (16) itself.

Best Available Copy

## INTERNATIONAL SEARCH REPORT

International Application No.

B 4 4 5 7 7 6 2 1 0  
PCT/GB 92/01416

|  |  |                                     |
|--|--|-------------------------------------|
| <b>I. CLASSIFICATION OF SUBJECT MATTER</b> (if several classification systems apply, indicate all) <sup>*</sup>  |  |                                     |
| According to International Patent Classification (IPC) or to both National Classification and IPC  |  |                                     |
| Int.Cl. 5 A01K11/00  |  |                                     |
| <b>II. FIELDS SEARCHED</b>   |  |                                     |
| Minimum Documentation Searched <sup>7</sup>  |  |                                     |
| Classification System  | Classification Symbols   |                                     |
| Int.Cl. 5  | A01K ; B25B  |                                     |
| Documentation Searched other than Minimum Documentation to the extent that such documents are included in the fields searched <sup>8</sup>   |  |                                     |
| <b>III. DOCUMENTS CONSIDERED TO BE RELEVANT<sup>9</sup></b>  |  |                                     |
| Category <sup>10</sup>   | Citation of Document, <sup>11</sup> with indication, where appropriate, of the relevant passages <sup>12</sup> | Relevant to Claim No. <sup>13</sup> |
| X  | EP,A,0 004 221 (S.A. NOE ELEVAGE SERVICE)<br>19 September 1979<br>see claim 1; figures 1-4                     | 1-4                                 |
| X  | US,A,4 402 320 (FILMER)<br>6 September 1983<br>see the whole document  | 1-4                                 |
| X  | US,A,4 368 735 (FILMER)<br>18 January 1983<br>see the whole document   | 1-4                                 |
| <p><sup>10</sup> Special categories of cited documents: <sup>10</sup></p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"&amp;" document member of the same patent family</p> |  |                                     |
| <b>IV. CERTIFICATION</b>   |  |                                     |
| Date of the Actual Completion of the International Search  | Date of Mailing of this International Search Report  |                                     |
| 23 OCTOBER 1992  | 12.11.92   |                                     |
| International Searching Authority  | Signature of Authorized Officer  |                                     |
| EUROPEAN PATENT OFFICE   | VON ARX V.U.   |                                     |

B 445776210

ANNEX TO THE INTERNATIONAL SEARCH REPORT  
ON INTERNATIONAL PATENT APPLICATION NO. GB 9201416  
SA 62675

This annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report. The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information. 23/10/92

| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
|---|---------------------|----------------------------|---------------------|
| EP-A-0004221                              | 19-09-79            | FR-A- 2423152              | 16-11-79            |
| US-A-4402320                              | 06-09-83            | US-A- 4368735              | 18-01-83            |
| US-A-4368735                              | 18-01-83            | US-A- 4402320              | 06-09-83            |

EPO FORM 8000

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

Best Available Copy

## PATENT COOPERATION TREATY

B 445776210

PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

|  |  |   |
|--|--|---|
| Applicant's or agent's file reference<br>38.58483    | For Further Action See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |   |
| International Application No.<br>PCT/GB92/01416      | International Filing Date<br>(day/month/year) 31 July 1992   | Priority Date<br>(day/month/year) 1 August 1991 |
| International Patent Classification (IPC) A01K 11/00 |  |   |
| Applicant HAWKINS, MICHAEL HOWARD ET AL              |  |   |

|      |   |   |
|------|---|---|
| 1.   | This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.  |   |
| 2.   | This REPORT consists of a total of 4 sheets.  |   |
|      | <input type="checkbox"/> This report is also accompanied by ANNEXES i.e., sheets of the description, claims and/or drawings amended during international preliminary examination and/or containing rectifications made before this Authority. |   |
|      | These annexes consist of a total of sheets.   |   |
| 3.   | This report contains indications relating to the following items:   |   |
| I    | <input checked="" type="checkbox"/>   | Basis of the report   |
| II   | <input type="checkbox"/>  | Priority  |
| III  | <input type="checkbox"/>  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| IV   | <input type="checkbox"/>  | Lack of unity of invention  |
| V    | <input checked="" type="checkbox"/>   | Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| VI   | <input type="checkbox"/>  | Certain documents cited   |
| VII  | <input checked="" type="checkbox"/>   | Certain defects in the international application  |
| VIII | <input type="checkbox"/>  | Certain observations on the international application   |

|  |  |
|--|--|
| Date of submission of the demand 17 February 1993  | Date of completion of this report 5 October 1993 |
| Name and mailing address of the IPEA<br>The Patent Office<br>Cardiff Road<br>NEWPORT<br>Gwent<br>NP9 1RH | Authorized Officer K J Kennett                   |
| Facsimile No 0633 814444   | Telephone No 0633 814730                         |

Form PCT/IPEA/409 (first sheet) (July 1992)

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International Application No  
PCT/GB92/014

## I. Basis of the report

1. This report has been drawn on the basis of:

- ☒ the international application as originally filed.
- ☐ the description,      pages, as originally filed,  
                                 pages, filed with the demand,  
                                 pages, filed with the letter of  
                                 pages, filed with the letter of
- ☐ the claims,              pages, as originally filed,  
                                 pages, as amended under Article 19,  
                                 pages, filed with the demand,  
                                 pages, filed with the letter of  
                                 pages, filed with the letter of
- ☐ the drawings,          sheets, as originally filed,  
                                 sheets, filed with the demand,  
                                 sheets, filed with the letter of  
                                 sheets, filed with the letter of

2. The amendments have resulted in the cancellation of: pages:  
   sheets of drawings No:

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box.

4. Additional observations, if necessary:

## II. Priority

1. ☐ This report has been established as if no priority had been claimed due to the failure to furnish within the prescribed time limit the requested:
- ☐ copy of the earlier application whose priority has been claimed.
- ☐ translation of the earlier application whose priority has been claimed.
2. ☐ This report has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid.

Thus for the purposes of this report, the international filing date indicated above is considered to be the relevant date.



## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International Application No  
PCT/GB92/01266

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. STATEMENT

|                               |                |     |
|-------------------------------|----------------|-----|
| Novelty (N)                   | claims 5       | YES |
|                               | claims 1-4,6,7 | NO  |
| Inventive Step (IS)           | claims 5       | YES |
|                               | claims 1-4,6,7 | NO  |
| Industrial Applicability (IA) | claims 1-7     | YES |
|                               | claims         | NO  |

## 2. CITATIONS AND EXPLANATIONS

Claims 1-4, 6 and 7 do not meet the requirement of novelty having regard to the matter disclosed in EP 0004221; US 4402320 and US 4368735 cited in the International Search Report since the specifications describe animal ear tag applicators having elongate tag engagement means pivotally connected to one end of a jaw member.

Claim 5 meets the requirements of novelty and inventive step in that the features defined in the claim are neither disclosed nor suggested in the cited prior art.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International Application No  
PCT/GB92/01416

## VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

Claim 8 does not comply with Rule 6.2(a) since it relies on a reference to the description and/or drawings.

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

|  |   |   |
|--|---|---|
| Applicant's or agent's file reference<br><b>38.58483</b> | <div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <b>FOR FURTHER ACTION</b> </div> <div style="width: 60%; font-size: small;">           see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.         </div> </div> |   |
| International application No.<br><b>PCT/GB92/01416</b>   | International filing date (day/month/year)<br><div style="text-align: center;"><b>31/07/92</b></div>  | (Earliest) Priority Date (day/month/year)<br><div style="text-align: center;"><b>01/08/91</b></div> |
| Applicant<br><br><b>HAWKINS, Michael Howard et al.</b>   |   |   |

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ Certain claims were found unsearchable (see Box I).
  
2. ☐ Unity of invention is lacking (see Box II).
  
3. ☐ The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing
 

☐ filed with the international application.  
☐ furnished by the applicant separately from the international application,  

☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.

  
☐ Transcribed by this Authority
  
4. With regard to the title, ☒ the text is approved as submitted by the applicant.  
☐ the text has been established by this Authority to read as follows:
  
5. With regard to the abstract,
 

☐ the text is approved as submitted by the applicant.  
☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.
  
6. The figure of the drawings to be published with the abstract is:
 

Figure No. 1 ☒ as suggested by the applicant. ☐ None of the figures.  
☐ because the applicant failed to suggest a figure.  
☐ because this figure better characterizes the invention.

## Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

The invention relates to an applicator for use on livestock such as cattle, sheep, deer and the like. The applicator includes at least two pivotally connected handle members (2,3) which extend into upper and lower jaws (4,5). A driving means (14) comprising a five sided body portion and elongate tag engagement (16) means to which an ear tag can be attached which are pivotally connected to the upper jaw member (5). There is also provided a biasing means (12) which is in constant contact with one side of the body portion and is used in conjunction with a restraining means (7) to ensure that the tag engagement means (16) is maintained in a downwardly pointing "cocked" position during application of an ear tag. Upon insertion of the ear tag through the animal's ear, the tag engagement means (16) can be pivoted into a second "spent" position to facilitate easy detachment of the applicator from the ear tag. The orientation of the tag engagement means (16) being determined by the combined effect of the restraining means (7,11) biasing means (12) and load placed on the tag engagement means (16) itself.

## INTERNATIONAL SEARCH REPORT

International Application

PCT/GB 92/01416

|   |  |   |
|---|--|---|
| <b>I. CLASSIFICATION OF SUBJECT MATTER</b> (If several classification symbols apply, indicate all) <sup>6</sup>   |  |   |
| According to International Patent Classification (IPC) or to both National Classification and IPC<br>Int.Cl. 5 A01K11/00  |  |   |
| <b>II. FIELDS SEARCHED</b>  |  |   |
| Minimum Documentation Searched <sup>7</sup>   |  |   |
| Classification System   | Classification Symbols   |   |
| Int.Cl. 5   | A01K ; B25B  |   |
| Documentation Searched other than Minimum Documentation<br>to the Extent that such Documents are Included in the Fields Searched <sup>8</sup>   |  |   |
| <b>III. DOCUMENTS CONSIDERED TO BE RELEVANT<sup>9</sup></b>   |  |   |
| Category <sup>10</sup>  | Citation of Document, <sup>11</sup> with indication, where appropriate, of the relevant passages <sup>12</sup> | Relevant to Claim No. <sup>13</sup>                             |
| X   | EP,A,0 004 221 (S.A. NOE ELEVAGE SERVICE)<br>19 September 1979<br>see claim 1; figures 1-4<br>---              | 1-4   |
| X   | US,A,4 402 320 (FILMER)<br>6 September 1983<br>see the whole document<br>---                                   | 1-4   |
| X   | US,A,4 368 735 (FILMER)<br>18 January 1983<br>see the whole document<br>-----                                  | 1-4   |
| <p><sup>10</sup> Special categories of cited documents : <sup>10</sup></p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step.</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents; such combination being obvious to a person skilled in the art.</p> <p>"&amp;" document member of the same patent family.</p> |  |   |
| <b>IV. CERTIFICATION</b>  |  |   |
| Date of the Actual Completion of the International Search<br>23 OCTOBER 1992  |  | Date of Mailing of this International Search Report<br>12.11.92 |
| International Searching Authority<br>EUROPEAN PATENT OFFICE   |  | Signature of Authorized Officer<br>VON ARX V.U.                 |

**ANNEX TO THE INTERNATIONAL SEARCH REPORT  
ON INTERNATIONAL PATENT APPLICATION NO.**

GB 9201416  
SA 62675

This annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report.  
The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information. 23/10/92

| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
|---|---------------------|----------------------------|---------------------|
| EP-A-0004221                              | 19-09-79            | FR-A- 2423152              | 16-11-79            |
| US-A-4402320                              | 06-09-83            | US-A- 4368735              | 18-01-83            |
| US-A-4368735                              | 18-01-83            | US-A- 4402320              | 06-09-83            |

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 92/01416

|   |  |   |
|---|--|---|
| <b>I. CLASSIFICATION OF SUBJECT MATTER</b> (If several classification symbols apply, indicate all) <sup>6</sup>   |  |   |
| According to International Patent Classification (IPC) or to both National Classification and IPC   |  |   |
| Int.Cl. 5 A01K11/00   |  |   |
| <b>II. FIELDS SEARCHED</b>  |  |   |
| Minimum Documentation Searched <sup>7</sup>   |  |   |
| Classification System   | Classification Symbols   |   |
| Int.Cl. 5   | A01K ; B25B  |   |
| Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched <sup>8</sup>  |  |   |
| <b>III. DOCUMENTS CONSIDERED TO BE RELEVANT<sup>9</sup></b>   |  |   |
| Category <sup>10</sup>  | Citation of Document, <sup>11</sup> with indication, where appropriate, of the relevant passages <sup>12</sup> | Relevant to Claim No. <sup>13</sup>                 |
| X   | EP,A,0 004 221 (S.A. NOE ELEVAGE SERVICE)<br>19 September 1979<br>see claim 1; figures 1-4<br>---              | 1-4   |
| X   | US,A,4 402 320 (FILMER)<br>6 September 1983<br>see the whole document<br>---                                   | 1-4   |
| X   | US,A,4 368 735 (FILMER)<br>18 January 1983<br>see the whole document<br>-----                                  | 1-4   |
| <p><sup>10</sup> Special categories of cited documents : <sup>10</sup></p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"&amp;" document member of the same patent family</p> |  |   |
| <b>IV. CERTIFICATION</b>  |  |   |
| Date of the Actual Completion of the International Search   |  | Date of Mailing of this International Search Report |
| 23 OCTOBER 1992   |  | 12. 11. 92  |
| International Searching Authority   |  | Signature of Authorized Officer                     |
| EUROPEAN PATENT OFFICE  |  | VON ARX V.U.  |

# ANNEX TO THE INTERNATIONAL SEARCH REPORT ON INTERNATIONAL PATENT APPLICATION NO.

GB 9201416  
SA 62675

This annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report. The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information. 23/10/92

| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
|---|---------------------|----------------------------|---------------------|
| EP-A-0004221                              | 19-09-79            | FR-A- 2423152              | 16-11-79            |
| US-A-4402320                              | 06-09-83            | US-A- 4368735              | 18-01-83            |
| US-A-4368735                              | 18-01-83            | US-A- 4402320              | 06-09-83            |



**Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE**

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:



agent



common representative

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

Frank B. Dehn & Co.,  
Imperial House,  
15-19 Kingsway  
London WC2B 6UZ  
United Kingdom

Telephone No.

071 836 6193

Facsimile No.

071 240 0776

Teleprinter No.

261620



Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

**Box No. V DESIGNATION OF STATES**

The following designations are hereby made under Rule 4.9(a) (mark the applicable check-boxes; at least one must be marked):

**Regional Patent**

**EP European Patent:** AT Austria, BE Belgium, CH and LI Switzerland and Liechtenstein, DE Germany, DK Denmark, ES Spain, FR France, GB United Kingdom, GR Greece, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, SE Sweden, and any other State which is a Contracting State of the European Patent Convention and of the PCT



**OA OAPI Patent:** Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Gabon, Guinea, Mali, Mauritania, Senegal, Togo, and any other State which is a member State of OAPI and a Contracting State of the PCT (if other kind of protection or treatment desired, specify on dotted line)

**National Patent** (if other kind of protection or treatment desired, specify on dotted line):



AT Austria



MG Madagascar



AU Australia



MN Mongolia



BB Barbados



MW Malawi



BG Bulgaria



NL Netherlands



BR Brazil



NO Norway



CA Canada



PL Poland



CH and LI Switzerland and Liechtenstein



RO Romania



CS Czechoslovakia



RU Russian Federation



DE Germany



SD Sudan



DK Denmark



SE Sweden



ES Spain



US United States of America



FI Finland



GB United Kingdom



HU Hungary



JP Japan



KP Democratic People's Republic of Korea



KR Republic of Korea



LK Sri Lanka



LU Luxembourg

Check-boxes reserved for designating States (for the purposes of a national patent) which have become party to the PCT after issuance of this sheet:



In addition to the designations made above, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except the designation(s) of \_\_\_\_\_.  
The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation of a designation consists of the filing of a notice specifying that designation and the payment of the designation and confirmation fees. Confirmation must reach the receiving Office within the 15-month time limit.)

RECORD Henter Gpy  
PCT

# REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

|   |                                |
|---|--------------------------------|
| For receiving Office use only   |                                |
| International Application No.   | PCT/GB 92 / 01416              |
| International Filing Date   | 31 - 07 - 1992<br>31 July 1992 |
| United Kingdom Patent Office<br>PCT International Application<br>Name of receiving Office and "PCT" International Application |                                |
| Applicant's or agent's file reference<br>(if desired) (12 characters maximum) 38.58483  |                                |

04 September 1992

|   |   |
|---|---|
| <b>Box No. I TITLE OF INVENTION</b>   |   |
| Ear tag applicator  |   |
| <b>Box No. II APPLICANT</b>   |   |
| Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)  | <input type="checkbox"/> This person is also inventor.<br>Telephone No.<br>Facsimile No.<br>Teleprinter No.   |
| Hawkins, Michael Howard,<br>33a Birdwood Crescent,<br>Parnell,<br>Auckland, 1001<br>New Zealand   |   |
| State (i.e. country) of nationality:<br>GB  | State (i.e. country) of residence:<br>NZ  |
| This person is applicant for the purposes of: <input type="checkbox"/> all designated States <input checked="" type="checkbox"/> all designated States except the United States of America <input type="checkbox"/> the United States of America only <input type="checkbox"/> the States indicated in the Supplemental Box |   |
| <b>Box No. III FURTHER APPLICANTS AND/OR (FURTHER) INVENTORS</b>  |   |
| Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)  | This person is:<br><input type="checkbox"/> applicant only<br><input checked="" type="checkbox"/> applicant and inventor<br><input type="checkbox"/> inventor only (If this check-box is marked, do not fill in below.) |
| Gardner, Michael Stuart,<br>108 Waiatarua Road,<br>Remuera,<br>Auckland, 1005<br>New Zealand  |   |
| State (i.e. country) of nationality:<br>NZ  | State (i.e. country) of residence:<br>NZ  |
| This person is applicant for the purposes of: <input type="checkbox"/> all designated States <input type="checkbox"/> all designated States except the United States of America <input checked="" type="checkbox"/> the United States of America only <input type="checkbox"/> the States indicated in the Supplemental Box |   |
| Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)  | This person is:<br><input type="checkbox"/> applicant only<br><input type="checkbox"/> applicant and inventor<br><input type="checkbox"/> inventor only (If this check-box is marked, do not fill in below.)            |
|   |   |
| State (i.e. country) of nationality:  | State (i.e. country) of residence:  |
| This person is applicant for the purposes of: <input type="checkbox"/> all designated States <input type="checkbox"/> all designated States except the United States of America <input type="checkbox"/> the United States of America only <input type="checkbox"/> the States indicated in the Supplemental Box            |   |
| <input type="checkbox"/> Further applicants and/or (further) inventors are indicated on a continuation sheet.   |   |

address PCT/B

SUBSTITUTE SHEET

**Box No. VI PRIORITY CLAIM**Further priority claims are indicated in the Supplemental Box ☐

The priority of the following earlier application(s) is hereby claimed:

| Country<br>(in which, or for which, the<br>application was filed) | Filing Date<br>(day/month/year) | Application No. | Office of filing<br>(only for regional or<br>international application) |
|---|---------------------------------|-----------------|---|
| (1) NZ  | 01-08-1991<br>1 August 1991     | 239223          |   |
| (2)   |                                 |                 |   |
| (3)   |                                 |                 |   |

Mark the following check-box if the certified copy of the earlier application is to be issued by the Office which for the purposes of the present international application is the receiving Office (a fee may be required):

☐ The receiving Office is hereby requested to transmit to the International Bureau a certified copy of the earlier application(s) identified above at item(s) : \_\_\_\_\_
**Box No. VII EARLIER SEARCH**

Fill in where a search (international, international-type or other) by the International Searching Authority has already been carried out or requested and the Authority is now requested to base the international search, to the extent possible, on the results of that earlier search. Identify such search or request either by reference to the relevant application (or the translation thereof) or by reference to the search request:

Country (or regional Office): \_\_\_\_\_ Date (day/month/year): \_\_\_\_\_ Number: \_\_\_\_\_

**Box No. VIII CHECK LIST**

This international application contains the following number of sheets:

- |                |     |        |
|----------------|-----|--------|
| 1. request     | : 3 | sheets |
| 2. description | : 8 | sheets |
| 3. claims      | : 3 | sheets |
| 4. abstract    | : 1 | sheets |
| 5. drawings    | : 4 | sheets |

Total : 19 sheets

This international application is accompanied by the item(s) marked below:

- |  |  |
|--|--|
| 1. <input type="checkbox"/> separate signed power of attorney      | 5. <input checked="" type="checkbox"/> fee calculation sheet                         |
| 2. <input type="checkbox"/> copy of general power of attorney      | 6. <input type="checkbox"/> separate indications concerning deposited microorganisms |
| 3. <input type="checkbox"/> statement explaining lack of signature | 7. <input type="checkbox"/> nucleotide and/or amino acid sequence listing            |
| 4. <input type="checkbox"/> priority document(s) (specify):        | 8. <input type="checkbox"/> other (specify):   |

Figure No. 1 of the drawings (if any) should accompany the abstract when it is published.

**Box No. IX SIGNATURE OF APPLICANT OR AGENT**

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).

Frank, B. Dehn &amp; Co.,

  
 By: Piesold, Alexander J.

For receiving Office use only

|   |   |
|---|---|
| 1. Date of actual receipt of the purported international application: 31 July 1992 31-07-1992   | 2. Drawings:<br><br><input type="checkbox"/> received :<br><br><input type="checkbox"/> not received: |
| 3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application: |   |
| 4. Date of timely receipt of the required corrections under PCT Article 11(2):  |   |
| 5. International Searching Authority specified by the applicant: ISA /  |   |
| 6. <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid   |   |

For International Bureau use only

Date of receipt of the record copy by the International Bureau:

10 AUGUST 1992

(10.08.92)